

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

REISSUE APPLICATION OF:

Richard Alan Haase

PATENT NO: 5,846,435

\*Also Re-exam 90/005,710

FILED: December 8, 1998

TITLE: Method for Dewatering of Sludge

§ DOCKET NO.: 0170SS:45347

§

§

§ GROUP ART NO.: UNKNOWN

§

§

§ EXAMINER: UNKNOWN

§

AMENDMENT PAPER

The Honorable Commissioner  
of Patents & Trademarks  
Box: Reissue Patent Application  
Washington, D.C. 20231

FAX RECEIVED

MAR 15 2001

PETITIONS OFFICE

Sir:

Please amend the claims as follows:

1. (Amended) A method for dewatering biological sludge that has been digested by a thermophilic digestion process comprising:

adding at least one polymeric quaternary ammonium compound[s], as primary component, to the biological sludge; and

adding polyacrylamide to the biological sludge;

such that any combination[s] of the polymeric quaternary ammonium compound[s] and of the polyacrylamide[s] enhances dewatering of the sludge.

2. (Amended) The method for dewatering biological sludge according to claim 1, wherein the polymeric quaternary ammonium compound[s are] is from di-allyl di-methyl ammonium chloride (DADMAC) family.

3. (Amended) The method for dewatering biological sludge according to claim 1, wherein the polymeric quaternary ammonium compound[s are] is from epichlorohydrin di-methyl amine (epi-DMA) family.

15. (Amended) A composition for dewatering biological sludge according to claim 1 comprising at least one polymeric quaternary ammonium compound[s], as primary component, and polyacrylamide, said components being present in the composition in a ratio to enable the composition to function as an agent for dewatering biological sludge from a thermophilic digestion process.

17. (New) The method for dewatering biological sludge according to claim 1, wherein a polymeric quaternary ammonium compound has a molecular weight from about 500,000 to 3,000,000 and is cationic and wherein the polyacrylamide has a molecular weight from about 5,000,000 to about 16,000,000.

18. (New) The method for dewatering biological sludge according to claim 15, wherein a polymeric quaternary ammonium compound has a molecular weight from about 500,000 to 3,000,000 and is cationic and wherein the polyacrylamide has a molecular weight from about 5,000,000 to about 16,000,000.

19. (New) The method of claim 15 wherein the polyacrylamide is cationic or anionic.

#### Status of Claims and Support for Claim Changes

Nineteen (19) claims are pending. Support for dependent claims 17 and 18 are found on page 8, column 6, lines 20-25, among other places. Support for the amended claims 1, 2, 3 and 15 is found in the examples in columns 7-9. Support for claim 19 is found in claims 4 and 8, among other places.

Respectfully submitted,



Sue Z. Shaper  
Registration No. 31,663  
Attorney for Applicant

Date: 12/05/00

Felsman, Bradley, Vaden,  
Gunter & Dillon, L.L.P.  
One Riverway, Suite 1100  
Houston, Texas 77056-1920  
Tel: (713) 961-3525